

Appl. No. : 10/789,892  
Filed : February 26, 2004

### AMENDMENTS TO THE CLAIMS

Please add new Claims 38 through 48 as follows:

Please cancel Claims 12, 14, 21, 29, and 33 as being directed to a non-elected species.

Please amend Claims 1-4, 23-28, 30, 31, 34, and 35 as follows:

1. **(Currently Amended)** A securement device for a percutaneous sheath introducer or ~~another other~~ medical article ~~articles~~ comprising:

a pad having an adhesive surface on one side thereof adapted to adhere to the skin of a patient at least when exposed to the atmosphere;

a ~~peel-off~~ peel-off backing sheet adhering to at least a portion of said pad and adapted to be expose said pad to the atmosphere when peeled away from said pad;

a securement base ~~fixedly~~ secured to said pad, ~~said base having one or more spaced holes extending therethrough~~, said base being comprised of a first upper support base portion supported at least in part by ~~secured to~~ a second lower support plate, said support plate being secured to said pad and including at least one biasing member, at least a portion of said biasing member being disposed below said first upper support base portion and having a generally fixed base and a deflectable beam section that flexes relative to said fixed base; and

at least one elongated strand being coupled to said biasing member and having a free end, said free end being configured to be tied about a portion of said medical article and secured relative to said securement base ~~extending through said one or more holes disposed on said base and secured thereto by tying the free end of said least one strand either upon itself or to another free end of the same or other strand and about said connector thereby fixedly securing the strand to said base.~~

2. **(Currently Amended)** The device of claim 1 wherein said base has one or more holes extending therethrough, and wherein said a flexible beam section is embedded in said second lower support plate, said strand extending through said beam section when inserted into the holes in said base.

3. **(Currently Amended)** The device of claim ~~1~~ 2 wherein said base has at least 1 spaced hole and at least 1 strand is provided.

4. **(Currently Amended)** The device of claim ~~1~~ 2 wherein said one or more ~~spaced~~ holes ~~through said base~~ include at least one or more hole portion extending through said upper

**Appl. No.** : 10/789,892  
**Filed** : February 26, 2004

support base portion and at least one or more hole portion extending through said lower support plate, said hole portions being aligned to form said at least one or more spaced holes through said base.

5. **(Original)** The device of claim 1 wherein said base has a concave portion in substantially the middle thereof.

6. **(Original)** The device of claim 1 wherein said base has a first elongated end wall spaced from a second elongated end wall, and said end walls are interconnected by spaced side walls curving inwardly at generally the midpoint thereof.

7. **(Original)** The device of claim 6 wherein said base has a concave portion at generally the midpoint thereof extending from one of said side walls where said side wall curves inwardly to the other.

8. **(Original)** The device of claim 7 wherein one end of said concave portion is raised with respect to the other.

9. **(Original)** The base of claim 7 wherein one end of said base adjacent one of said end walls slopes inwardly toward the center, then downwardly toward the other end wall to form a center raised portion.

10. **(Original)** The device of claim 1 including a plurality of spaced protrusions upwardly extending from said base.

11. **(Original)** The device of claim 10 wherein said protrusions are conically shaped having a wide base portion at its connection to said base extending upwardly to a rounded tapered end.

12. **(Cancelled).**

13. **(Original)** The device of claim 11 wherein said protrusions vary in overall height.

14. **(Cancelled).**

15. **(Original)** The device of claim 1 wherein said base is of a polycarbonate material.

16. **(Original)** The device of claim 1 wherein said base is of a plastic material.

17. **(Original)** The device of claim 1 wherein said pad is of a fabric material overlaid by a hydrocolloid adhesive material.

18. **(Original)** The device of claim 1 wherein said at least one strand is of a silk material.

Appl. No. : 10/789,892  
Filed : February 26, 2004

19. (Original) The device of claim 1 wherein said at least one strand is of flexible material.

20. (Original) The device of claim 1 wherein said at least one strand is of a flexible material substantially non-extendable along its long axis.

21. (Cancelled).

22. (Original) The device of claim 1 wherein said upper support base portion is of a polymeric material.

23. (Currently Amended) The device of claim 1-2 wherein said holes extending through said base include hole portions through tabs cut out of the upper surface of said base and attached at one end to the upper surface of said base and said hole portions communicating with hole portions through the remainder of said base.

24. (Currently Amended) The device of claim 1 wherein said biasing member a flexible beam is embedded in said second lower support plate and conforms ~~conforming~~ substantially to the configuration of said lower support plate and to said retained portion of said medical article a connector disposed on said base, said strand extending about and under said biasing member beam ~~when inserted into the said one or more holes in said base.~~

25. (Currently Amended) The device of claim 1 wherein said a biasing member flexible beam is integral with said lower support plate and substantially conforms ~~conforming~~ to the configuration of said lower support plate, said securement base of ~~said lower support plate~~, varying in hardness from the top to bottom thereof, said strand extending about and under said biasing member beam ~~when inserted into the said one or more holes in said base.~~

26. (Currently Amended) The device of claim 24 wherein said biasing member beam creates and maintains tension on said at least one strand when said at least one strand ~~it~~ is secured to said base.

27. (Currently Amended) The device of claim 26 wherein said base has one or more holes extending therethrough, and wherein said at least one strand is knotted in said at least one hole through said base.

28. (Currently Amended) The device of claim 27 wherein said at least one strand is glued to the underside of said second lower support plate ~~ramp~~.

29. (Cancelled).

30. **(Currently Amended)** A securement device for a percutaneous sheath introducer or ~~another other~~ medical ~~articles~~ article comprising:

a pad having an adhesive surface on one side thereof adapted to adhere to the skin of a patient at least when exposed to the atmosphere;

a ~~peel-off~~ peel-off backing sheet adhering to at least a portion of said pad and adapted to be expose ~~said pad to the atmosphere when~~ peeled away from said pad;

a securement base ~~fixedly~~ secured to said pad, ~~said base having one or more spaced holes extending therethrough,~~ said base being comprised of a first upper support base portion and secured to a second lower support portion plate, said first upper support portion being elastically deformable, and said second lower support portion plate being secured to said pad and being harder than said first upper support portion; and

at least one ~~flexible~~ elongated strand being coupled to said base and having a free end ~~one,~~ said free end being configured to be tied about a portion of said medical article and secured relative to said securement base ~~extending through said one or more holes disposed in said base and secured thereto.~~

31. **(Currently Amended)** The device of claim 30 wherein said base has one or more holes extending therethrough, and wherein said at least one strand has one end knotted in said hole extending through said base at the bottom thereof.

32. **(Original)** The device of claim 30 wherein said at least one strand has one end glued at the bottom thereof to said base.

33. **(Cancelled).**

34. **(Currently Amended)** The device of claim 30 wherein said base has at least two holes ~~are provided,~~ one of said holes extending through a tab on the upper surface of said base, the other of said holes being disposed in a post extending upwardly from said base spaced from said tab, said at least one strand extending upwardly through said one of said holes and knotted at the bottom of the hole through said base, then through the hole in said post where the free end of said strand is adapted to be tied to itself and about a connector on an ~~the~~ upper surface of said base.

35. **(Currently Amended)** The device of claim 34 wherein a concave area is provided in the first upper support base portion extending across said base, said concave area having a raised portion at generally the middle thereof.

36. **(Original)** The device of claim 34 including a plurality of protrusions extending upwardly from said base.

37. **(Original)** The device of claim 36 wherein said post extends upwardly from said base above said protrusions, said hole through said post being at the upper end thereof.

38. **(New)** A securement device for a percutaneous sheath introducer or other medical articles comprising:

a pad having an adhesive surface on one side thereof adapted to adhere to the skin of a patient when exposed to the atmosphere;

a peel off backing sheet adhering to at least a portion of said pad and adapted to expose said pad to the atmosphere when peeled away from said pad;

a securement base fixedly secured to said pad, said base having at least two spaced holes extending therethrough, one of said holes extending through a tab on the upper surface of said base, the other of said holes being disposed in a post extending upwardly from said base spaced from said tab, said base being comprised of a first upper support base portion secured to a second lower support plate, said support plate being secured to said pad, wherein a concave area is provided in the upper support base portion extending across said base, said concave area having a raised portion at generally the middle thereof; and

at least one flexible elongated strand having a free end one extending upwardly through said one of said holes and knotted at the bottom of the hole through said base, then through the hole in said post where the free end of said strand is adapted to be tied to itself and about a connector on the upper surface of said base.

39. **(New)** A securement device for a percutaneous sheath introducer or other medical articles comprising:

a pad having an adhesive surface on one side thereof adapted to adhere to the skin of a patient when exposed to the atmosphere;

a peel off backing sheet adhering to at least a portion of said pad and adapted to expose said pad to the atmosphere when peeled away from said pad;

a securement base fixedly secured to said pad, said base having at least two spaced holes extending therethrough and a plurality of protrusions extending upwardly from said base, one of said holes extending through a tab on the upper surface of said

base, the other of said holes being disposed in a post extending upwardly from said base spaced from said tab, said base being comprised of a first upper support base portion secured to a second lower support plate, said support plate being secured to said pad; and

at least one flexible elongated strand having a free end one extending upwardly through said one of said holes and knotted at the bottom of the hole through said base, then through the hole in said post where the free end of said strand is adapted to be tied to itself and about a connector on the upper surface of said base.

40. (New) A securement device for a percutaneous sheath introducer or other medical articles comprising:

a pad having an adhesive surface on one side thereof adapted to adhere to the skin of a patient when exposed to the atmosphere;

a peel off backing sheet adhering to at least a portion of said pad and adapted to expose said pad to the atmosphere when peeled away from said pad;

a securement base fixedly secured to said pad, said base having at least two spaced holes extending therethrough and a plurality of protrusions extending upwardly from said base, one of said holes extending through a tab on the upper surface of said base, the other of said holes being disposed in a post extending upwardly from said base spaced from said tab, said base being comprised of a first upper support base portion secured to a second lower support plate, said support plate being secured to said pad, wherein said post extends upwardly from said base above said protrusions, said hole through said post being at the upper end thereof; and

at least one flexible elongated strand having a free end one extending upwardly through said one of said holes and knotted at the bottom of the hole through said base, then through the hole in said post where the free end of said strand is adapted to be tied to itself and about a connector on the upper surface of said base.

41. (New) The device of claim 30 further comprising at least one biasing member, at least a portion of said biasing member being disposed below said first upper support portion and having a generally fixed base and a deflectable beam section that flexes relative to said fixed base.

42. (New) The device of claim 30, wherein said securement base increases in hardness from the bottom to the top.

**Appl. No.** : **10/789,892**  
**Filed** : **February 26, 2004**

43. (New) The device of claim 30, wherein said first upper support portion is comprised of a polymeric material that has a Shore A hardness of no greater than 35A durometer.
44. (New) The device of claim 30, wherein said second lower support portion produces compressive stresses within said first upper support portion that bear against said portion of said medical article when said medical article is secured to said securement base.
45. (New) The device of claim 30, wherein said second lower support portion is comprised of a first material and the first upper support portion is comprised of a second material, and the second material is softer than the first material.
46. (New) The device of claim 45, wherein said second material is a polymeric material.
47. (New) The device of claim 45, wherein said first material is a polycarbonate.
48. (New) The device of claim 1, wherein said at least one strand has one end glued at the bottom thereof to said base.